STATE OF NEW MEXICO
COUNTY OF DOÑA ANA
THIRD JUDICIAL DISTRICT COURT

THE STATE OF NEW MEXICO, EX REL. HECTOR BALDERAS, ATTORNEY GENERAL, Plaintiff, v. STERIGENICS U.S., LLC, SOTERA HEALTH HOLDINGS, LLC, SOTERA HEALTH LLC, AND SOTERA HEALTH COMPANY, Defendants.	)	No. D-307-CV-2020-02629

NOTICE OF FILING DECLARATION OF KENNY SULLIVAN, P.E.

Pursuant to Paragraph 7 of the Court's December 20, 2021 Order, Sterigenics U.S., LLC files the Declaration of Kenny Sullivan, P.E., confirming that a negative pressure system is an accepted and reliable method of preventing uncontrolled emissions of ethylene oxide from a facility.

[signature on following page]

This 21st day of January, 2022.

MODRALL, SPERLING, ROEHL, HARRIS & SISK, P.A.

By:*/s/ Jeremy K. Harrison*

Alex C. Walker (awalker@modrall.com)
Tiffany L. Roach Martin (tlr@modrall.com)
Jeremy K. Harrison (jkh@modrall.com)
Post Office Box 2168
500 Fourth Street NW, Suite 1000
Albuquerque, New Mexico 87103-2168
Telephone: 505.848.1800
Attorneys for Sterigenics U.S., LLC

ALSTON & BIRD LLP
W. Clay Massey (clay.massey@alston.com)
Admission pro hac vice
Daniel F. Diffley (dan.diffley@alston.com)
Admission pro hac vice
1201 West Peachtree Street
Atlanta, GA 30309
Telephone: 404.881.7000
Attorneys for Sterigenics U.S., LLC

WE HEREBY CERTIFY that a true and correct copy of the foregoing was submitted through the Odyssey Electronic Filing System for filing and service to all counsel of record this 21st day of January 2022.

MODRALL, SPERLING, ROEHL, HARRIS & SISK, P.A.

By: */s/ Jeremy K. Harrison*
Jeremy K. Harrison

STATE OF NEW MEXICO
COUNTY OF DOÑA ANA
THIRD JUDICIAL DISTRICT COURT

THE STATE OF NEW MEXICO, EX REL. HECTOR BALDERAS, ATTORNEY GENERAL, Plaintiff, v. STERIGENICS U.S., LLC, SOTERA HEALTH HOLDINGS, LLC, SOTERA HEALTH LLC, AND SOTERA HEALTH COMPANY, Defendants.	)	No. D-307-CV-2020-02629

DECLARATION OF KENNY SULLIVAN, P.E.

I, Kenny Sullivan, declare as follows:

1. I am a Project Engineer at Clean Air Engineering (CleanAir), an environmental source emission testing and consulting firm. I am over 18 years of age, of sound mind, and under no legal disability.

2. The facts set forth herein are based upon my expertise and personal knowledge of air emission testing and measurement, including that of ethylene oxide (EO) and negative pressure systems. If called to testify about these facts, I could and would do so competently and under oath.

Qualifications

3. For nearly fifty (50) years, CleanAir has provided respective clients environmental testing and consulting services. For multiple decades, CleanAir has provided source emission testing, monitoring, and laboratory analysis for a vast range of pollutants regulated under the jurisdiction of Title 40 of the Code of Federal Regulations (Title 40 CFR).

4. CleanAir is an American Society for Testing and Materials (ASTM) accredited air emission testing body. CleanAir is certified by the American Association for Laboratory Accreditation (A2LA) and Stack Testing Accreditation Council (STAC) to perform testing activities in compliance with ASTM. CleanAir is also accredited in accordance with the recognized International Standard ISO/IEC 17025 for technical competence in the field of environmental testing.

5. I am licensed by the state of Illinois as an environmental Professional Engineer (P.E.). I am certified as a Qualified Stack Testing Individual (QSTI) in promulgated test method Groups I through IV, which includes methodology in the measurement of EO, volumetric flow rate, and pollutant destruction efficiency.

6. I have been employed by CleanAir since June of 2009. I have experience in the execution of Environmental Protection Agency (EPA) promulgated methodology and measurement of volatile organic compounds

(VOCs), which EO is classified as per the EPA, since the start of my employment at CleanAir.

7. Since 2014, my responsibility at CleanAir has been project engineer. As a project engineer, I am responsible for every aspect of a procured test project. This includes protocol development, consulting, planning, test execution, and reporting. Since becoming a project engineer for CleanAir, I have managed projects including the testing and measurement of VOCs, negative pressure systems, and VOC capture and destruction efficiency.

8. Since 2019, I have been project engineer for several projects including the testing and measurement of EO, negative pressure systems, and EO removal and destruction efficiency. During this time, in addition to the standard project engineer responsibilities, I have aided and consulted in negative pressure system design, I have been responsible for the execution of an innovative measurement device designed for higher precision measurement of EO, and I have collaborated directly with EPA regulators and administrators for compliance and best practice methodology in the measurement of EO.

9. For EO and negative pressure system projects, I have tested the removal or destruction efficiency of control devices used in negative pressure systems. I have

also assessed the effectiveness of installed negative pressure systems and determined capture efficiencies.

Negative Pressure Systems

10. Definitions:

a. *affected area* – Any zone or enclosure within a facility which has the potential to create ambient or workspace exposure to a VOC, in this case EO.

b. *fugitive emissions* – Emissions from a facility which are not collected by a capture system and are released to the atmosphere.

c. *natural draft openings (NDOs)* – Any permanent opening in the enclosure that remains open during operation of the facility and is not connected to a duct in which a fan is installed. Examples of NDOs would be open windows, louvers, spaces under doors, and atmospheric vents.

d. *makeup air* – Air forced into the affected area by means of fan/blower or any other air flow inducing device. Makeup air is utilized to aid in the control of air pressure in the affected area and to ensure fresh air is routinely cycled into the affected area.

e. *face velocity* – The calculated rate, typically in feet per minute, of air flow through NDOs into or out of an affected area.

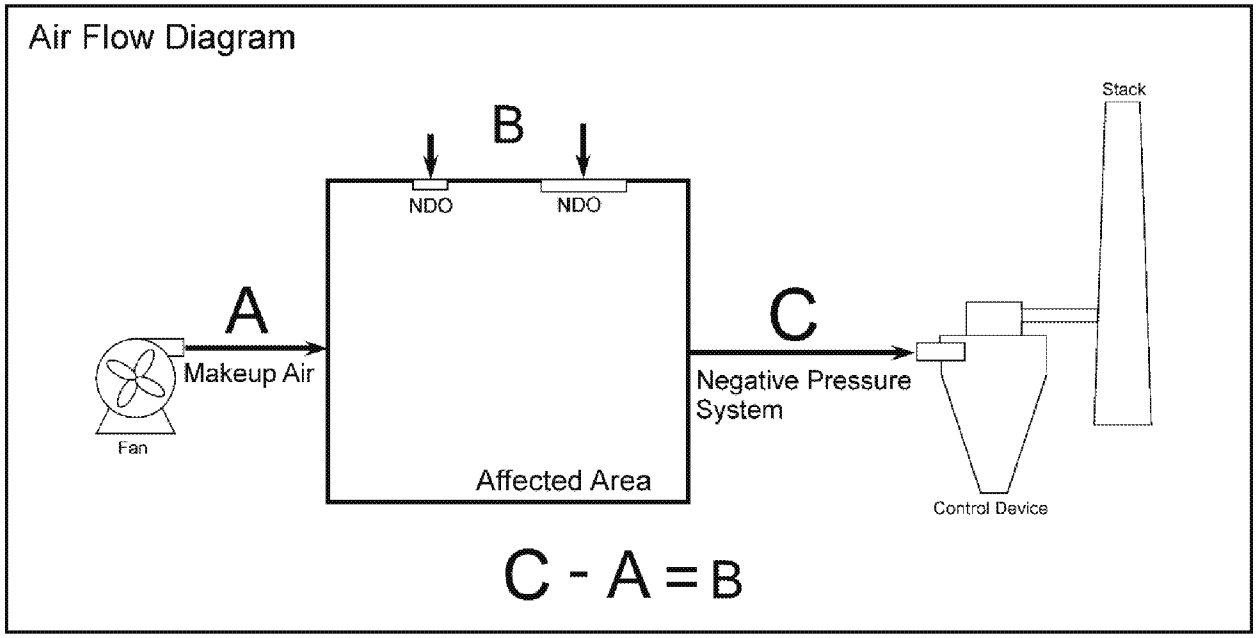
f. *control device* – Equipment that removes or eliminates certain compounds or groups of compounds (e.g., EO, VOCs) from the air through any manner of chemical and/or physical processes such as incineration, adsorption, absorption, and filtration, including but not limited to a dry bed system.

g. *negative pressure system* – A network of ducts, blowers/fans, hoods, louvers, vents, dampers, and control devices installed in and around the confines of an affected area with the goal of achieving 100% capture of fugitive emissions.

11. The basic premise of a negative pressure system is the following: If all air flow across the confines of an affected area is *into* the affected area, and all air flow inside the affected area is contained and ducted to a control device, then there are zero fugitive emissions. Emissions originating from inside the affected area are then considered 100% captured.

12. Negative pressure in the affected area is attained by drawing more air from the affected area into the negative pressure system than is being forced into the affected area via makeup air – thus, thinking in terms of 'in must equal out,' the

balance of air flow is drawn *into* the affected area through the NDOs, as depicted in the air flow diagram below.



13. If air flow being drawn into the negative pressure system (C) is greater than the makeup air (A), then the face velocity through NDOs (B) is considered positive, and the affected area is considered to be under negative pressure.

14. For the negative pressure system, components are designed so air flow through all NDOs is *into* the affected area and routed to a control device. The negative pressure system is designed so that the air pressure inside the affected area is negative relative to its immediate exterior surroundings. This means air outside the confines of the affected area, under higher pressure, will be drawn into the affected area instead of air inside of the affected area being allowed to emanate out

of the affected area. This inward air flow and negative pressure differential are maintained continuously for the duration of production.

Acceptability and Reliability of a Negative Pressure System

15. A negative pressure system is an accepted and reliable method of preventing uncontrolled EO emissions, i.e. fugitive emissions, from a facility. A negative pressure system is capable of effectively capturing 100% of EO fugitive emissions within the affected area of a facility.

I verify under penalty of perjury that the foregoing is true and correct.

Executed on January 20, 2022.

Kenny Sullivan, P.E.